Noeggerath (E.)

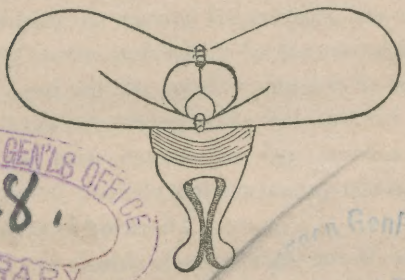
REMARKS

ON THE

EMPLOYMENT OF PESSARIES

WITH THE

Description of a New Instrument.



(WITH ILLUSTRATIONS)

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OF NEW-YORK.

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The more intractable a disease has proven to treatment, the greater is the number of so-called infallible remedies proposed against it. This is true of prolapsus uteri. Every year, almost from the days of Hippocrates, has enriched the number of uterine instruments for the cure of falling of of the womb, and still the mystery seems to be undissolved. This is partially owing to the fact that till now no instrument has been constructed that satisfies practitioners in general, partially to the inventing-mania of some of our professional brethren.

There are two classes of physicians, one of which being disgusted with the host of mechanical appliances, now lauded, now rejected, has almost entirely abandoned the application of pessaries; while the other treats the slightest deviation with a mechanical support. Though the latter do more harm than the former, neither of them proceed upon the correct principle.

As to the comparative value of the bloody operation for prolapsus, the question is not yet settled. When we attempt a final solution of the question, whether the average number of subjects operated upon are permanently benefitted by it or not, we are overwhelmed daily with the most cantradictory reports of its value. Moreover, the greatest number of practitioners are called upon to treat cases not in the hospital, but private patients, who claim

a right to dispose of themselves just as they choose. And most of them are alarmed at the very sight of a bistoury.

And still there are physicians, some of the highest standing, who try to avoid the use of a pessary by treating cases of prolapsus, on the so-called radical plan, i. e. by removing the original disease, chronic metritis, hypertrophy of the womb, &c., applying afterwards adstringent injections and suppositories, while the patients are laid up for two or six months, to be discharged with an abdominal supporter! The great objection to this plan is the fact, that it is crowned with success only in an exceedingly small number of cases, while its employment is perfectly out of the question in the largest majority of cases, because that class of society among which prolapsus is commonly found, has neither time nor means to resort to it. It is the working portion of the sex which is stricken with this complaint, and they want a prompt and cheap remedy for their complaint.

In regard to abdominal supporters (Annan, Hull, Hamilton, Giehrl) I consider them as an excellent adjuvans in the treatment of prolapsus, but altogether the relief derived from them is by far less than that offered by a well-adapted pessary.

The only operation which is always followed by great relief, is the amputation of the cervix, in cases where the prolapsus is owing to hypertrophy of the lower section of the womb. Dr. C. Mayer of Berlin, the well-known obstetrician, has resorted to it with the fullest satisfaction in a great number of cases.

In recommending the use of pessaries in the treatment of prolapsus uteri, I am far from a method too often resort-

ed to in every-day practice, viz., that of diagnosticating prolapsus uteri and prescribing a pessary at once. Nay, there are cases which do not justify instrumental treatment at all, while almost every single case demands a preparatory treatment before a pessary can be applied. The necessity of a scrutinous examination, and a full consideration of the present complications cannot be urged strongly enough. The neglecting of this principle is the common source of failure in the treatment of prolapsus. For the same reason no physician should prescribe a pessary on the sole assertion of the patient herself, that she suffers from falling of the womb. I have frequently met with patients, who believed themselves to be subject to this complaint, who, upon examination, were found to have metritis or other malpositions and flexions of the womb. It is obvious, that a pessary in this class of cases would be injurious instead of beneficial.

The patient must be examined as well in an erect as in a horizontal position, as it often happens, that a prolapsus disappears entirely when the patient is lying on her back. After the presence of prolapsus has been ascertained in this way, the patient must be subjected to a thorough examination, while in a horizontal position. It is best to begin with the palpation of the abdomen, in order to get a knowledge of abnormities in the supra-pelvic and pelvic cavities. Hereafter the prolapsed portions themselves must be inspected, and the state of the anterior and posterior wall and that of the womb itself have to be taken into consideration.

Moreover, the color and condition of the respective mucous membranes have to be taken into consideration, as

well as the presence of ulcerations, their different character, their seat in the cervical canal, near the orifice or on the walls of the vagina. Hereafter the prolapsed portions have to be touched all around with the fingers, in order to ascertain their condition, and the possibility of full or partial reduction. In order to get a full view of the position of the uterus, it is well to introduce one or two fingers into that portion of the vagina which is inside of the pelvis. By examining through the rectum, we may ascertain how far it is involved in the prolapsus. Hereafter the situation and size of the womb has to be ascertained with the probe and that of the bladder with the catheter. After this the parts must be pushed upwards, in order to examine the sexual organs inside of the pelvis and the pelvis itself. In those cases, where the neck of the uterus is not in sight, it has to be explored with the speculum.

The different forms which a prolapsus may represent, are as follows: 1) one of the walls of the vagina may prolapse, without participation of the womb, viz.:

a) Prolapsus of the anterior wall of the vagina.

b) Prolapsus of the posterior wall. These cases are generally recorded under the name of cystocele and rectocele vaginalis.

2) Prolapsus of one or both vaginal walls, with partial prolapsus of the womb.

a) Prolapsus of the anter. wall of the vagina and partial prolapsus of the womb.

b) Prolapsus of the posterior wall of the vagina and partial prolapsus of the womb.

c) Prolapsus of both walls of the vagina and partial prolapsus of the womb.

The cases of prolapsus of the anterior wall and the uterus are very often connected with retroversion and flexions of the womb. The body of the womb is generally turned somewhat backwards, pressing upon the os-sacrum and rectum. These cases, therefore, are very often complicated with very troublesome constipations of the bowels.

3) Prolapsus of both vaginal walls and complete prolapsus of the womb. This variety is the most commonly met with, because, women affected with the disease very often do not apply for medical advice until 20 or even 40 years have passed since its first start.

4) Prolapsus of the uterus. This is of very rare ocurrence. The inferior portion of the womb, generally hypertrophied in a great measure, protrudes between the labia majora as a thin cone, which sometimes attains the length of three or four inches. As its lower end is rounded off, and perforated by the orifice, it looks just like a penis.

In most cases of prolapsus the lining membrane is the seat of superficial or deeper ulceration. The ulcerations coincident with prolapsus must be divided into two different classes, viz., those, which are the consequence of an idiopathic uterine disease, and those which are the result of mechanical insults. This distinction is important with regard to treatment. The ulcerations of a mechanical nature are confined by irregular, sharp, callous edges, their base is discolored with a brownish hue, yielding a dirty, thin, often very offensive secretion. The ulcerations from chronic metritis are of a more inflammatory character, inclined to bleeding, spreading rapidly on the slightest oc-

casion, and very obstinate to treatment, unless the metritis has been subdued beforehand.

Other complications very often connected with prolapsus are *retroflexio*, *retroversio*, and *anteflexio*. Every complete prolapsus uteri is followed by *hypertrophy* of the organ, which attains in most cases the longitudinal axis, while at times the womb is considerably increased in thickness. In the first instances the probe may be advanced into its cavity as far as five or seven inches. In other cases the cervical portion alone or one of the lips only are hypertrophied.

In consequence of the *displacement of the bladder*, always present in cases of prolapsus of the anterior wall of the vagina, the urethra is often covered with fungous vegetations, which at times attain the length of half an inch in diameter. *Hernia recti* and *prolapsus ani* are of comparatively rare occurrence, while *rupture* of the *perineum* is not seldom. These and other complications have to be removed as far as possible before the applica- of a pessary can be thought of. The treatment of some is very tedious, and demands a good deal of patience from the attending physician and the woman herself.

Chronic metritis, hyperæmia and painfulness of the prolapsed parts must be treated with leeches, scarifications, anodynes, resorbents, &c. The ulcerations have to be cured thoroughly before a permanent retention of the womb can be thought of. It is perfectly contradictory to experience, that the reposition of the parts into the vagina is sufficient for the cure of these ulcerations, an opinion cherished by some of our very first obstetric physicians. The only complication which requires no treatment

before the application of a pessary is simple hypertrophy of the womb.

The most efficient remedies for treating these ulcerations are, nitrate of silver, acidum pyrolignosum, scarifications, removal with the knife of the callous edges, fomentations with lead-water, slight cathartics.

The *ulcerations* of the *vaginal walls* are of a very intractable nature, they are never benefitted by the application of caustics, such as nitrate of silver; scarifications repeated every third or fourth day, and the applications of acid. pyrolignosum answer much better. They often require twelve or eighteen months' treatment before a sufficiently firm scar has been attained. The ulcerations seated in or near the cervical canal must be healed up, at least as far as they spread over the lips, before a pessary can be introduced, while the treatment of the intracervical ulcerations may be continued afterwards with the speculum. It must never be forgotten, that all ulcerations which are touched by the pessary will increase and make the use of an instrument impossible. Only in those exceptional cases, where the ulcerations resist the most rational and persevering treatment, one may cover them with a piece of soft and dry lint, and introduce a pessary afterwards, and continue treatment intra vaginum. In those cases where bodily rest can be resorted to, it is of great value for the cure of ulcerations, at any rate, in treating these affections, the greatest cleanliness must be observed, the parts must be thoroughly sponged after going to stool, and they must be covered always with a clean piece of dry linen.

The use of a pessary seems to be connected with the

greatest difficulty in those patients, where prolapsus is complicated with both hypertrophy and flexion of the womb.

In the very first days of its application violent back-ache, a sensation of bearing-down and prolapsus of one of the vaginal walls make their appearance. When examined, the body of the retroflected uterus is found very painful, and, ulcerations appear on different places.

In these cases it is a good plan to elevate the retroflected womb by the uterine sound, thus fixing it towards the promontory. Hereafter a pessary may be introduced and absolute rest recommended for some time. If this is not sufficient, the only means left, is to introduce a soft sponge behind the cervical neck, which in many cases does retain the prolapsed womb in its position. The sponge has to be removed, cleansed and re-introduced daily for some weeks before another application of a pessary may be tried, which at first must be applied in connection with the sponge. By a strict and indefatigable adherence to these rules, finally a pessary is endured without any inconvenience.

After a full consideration and treatment of the different complications, it is of the greatest importance to choose the right kind of instrument.

The requisites of a good instrument are as follows: 1. It must retain the womb in or near its natural position. 2. It must neither irritate the womb nor the vagina. 3. It must not interfere with the patient's moving round, sitting, or excretion of urine and fæces. 4. It must be composed of a substance, which resists the corrosive influence of the secretions from the genitals. 5. It must be con-

structed, so as to be easily introduced, removed and cleaned by the patient herself. 6. It must be as cheap as possible.

The different pessaries may be divided into two sections, viz: those, which support the womb directly, and those which support it indirectly, by elevating the vagina. Until late years only the former class was exclusively applied, as this idea most naturally suggested itself at first sight. They are divided again into *stalked* and *unstalked*, the former being in use ever since medical science was established. Both are intended to give a direct support to the fallen uterus. Later researches seem to show, that the chief and most natural support of the uterus was presented by the vagina, and in this view surgical operations as well as instruments were invented, and as it seems, successfully applied for the cure of prolapsus.

The first man who clearly followed this indication in constructing his pessary, was Prof. Kilian, in 1846, and he called it elytromochlion, i. e. vaginal supporter.

Fig. 1.

His instrument consisted of a thin steel spring, 4 inches long, the points of which ended in wooden buttons, and the whole of it was covered with a thin layer of india-rubber. In introducing the instrument, the ends of it are approximated to each other as much as is required for its easy introduction into the vagina.

In applying it, it must be elevated in the direction of

the lateral diameter of the vagina, while its convex portion is directed towards the anterior walls of the pelvis. The instrument thus bent is gently pushed upwards, so that its points take a position to the right and left side of the uterine neck, as high up as possible in the laquear vaginæ.

Although the instrument has been abandoned by the profession, owing to the fact, that very few women can bear the pressure which it necessarily must exert, in order to sustain itself in the vagina, the elytromochlion of Kilian has been applied in some cases successfully, thus proving that the theory of its construction was based upon sound principles.

In 1853, Dr. Zwank, of Hamburg, published the description of his new *hysterophor*. It consists of two ovoid thin pieces of metal, covered with india-rubber, or of wood, connected on one end by a joint. In the neighborhood of this joint, on the external surface of the wings, is a metallic pin, on each side two inches long, which can be screwed together at the lower end.

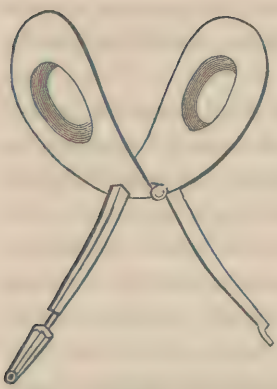

Fig 2.

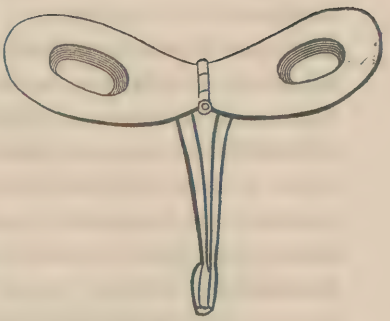

Fig. 3.

In applying the instrument, the wings are approached as much as possible (fig. 2) and introduced, so that its convex portion is turned towards the os-sacrum, and pushed upwards, as high as possible, towards the anterior portion of the laquear vaginæ, in front of the neck of the uterus. Afterwards the lower ends of the metallic handles are compressed, and fastened by the screw (see fig 3.) In this position the instrument is retained by itself.

About the same time, Dr. Schilling, of Munich, invented quite a similar instrument to that of Zwank; the only difference being, that the movement of the wings is effected, and can be regulated by the screw at its lower end. The purpose of both instruments is, to gently expand the lateral portions, and sustain the superior wall of the vagina, thus preventing its inversion, and consequently, the falling of the womb.

Dr. Zwank's instrument was received enthusiastically by the profession in Germany. Such men as C. Mayer, Chiari, Braun, Scanzoni, Breslau, &c. thought it of suf-

ficient importance, to publish their observations in favor of this instrument, and at the present time it has actually supplanted all of its kind.

What is the reason of this? Is it because the profession seized upon the instrument, because it was a new invention? Is it because an instrument was wanted? or has it fulfilled what it claimed to do?

The question which we propose to consider, is whether this instrument has any advantage over those other means, hitherto applied for the same purpose. It certainly has; because 1. it is lighter; 2. it touches only a comparatively small circumference of the vagina, and scarcely any portion of the womb; thus preventing irritation and ulceration of the vagina, incarceration of the uterus, fluor-albus, uneasy feelings; 3. it can be easily introduced and removed, easily brought to its proper place, easily cleaned by the patient herself. This is a combination of advantages, sought for in vain among the host of previously-invented pessaries. On the other hand, the hysterophors of Zwank and Schilling have some disadvantages, owing to the substance of which they are composed. The greatest number of them, as now in use, are covered with a coat of vulcanized india-rubber. The discharges of the vagina destroy it in a very short time. After this has been done, the metallic portions begin to rust and decay, thus irritating the vulva; the furrows of the screw at the lower end of the instrument begin to crust, or the screw, if turned too firmly, cannot be untwisted. Some patients have little dexterity, and do not know how to manage the screw at all. An illustration of these facts I am seeing daily, in the case of a lady belonging to the first class of

society. She is the widow of a well-known physician of this city, and has suffered from prolapsus uteri ever since her first confinement, many years ago. The most thorough examination is unable to detect anything abnormal about her genital organs, except prolapsus uteri. She has been under the very best treatment of general practitioners and uterine specialists. Everything has been resorted to, to effect a radical cure, and all kinds of pessaries employed, but in vain. At length, one of Zwank's pessaries was suggested. She has worn it now for a year, and is perfectly satisfied ; the only drawback being the loss of the india-rubber coating and the rusting of the metallic skeleton.

In order to avoid these inconveniences, Dr. Eulenburg, of Coblenz, modified Dr. Zwank's pessary, and described his instrument in a short thesis, in 1857. It is made entirely of boxwood, and its wings are a little differently shaped, viz.: they are slightly curved downwards at both ends, so that the lower side forms a concave surface. In consequence of this shape, the lateral branches closely adapt themselves to the inner surface of the ramus descendens ossium pubis; thus presenting a kind of hook, which gives a strong hold to the instrument when in the vagina. Both wings move in the centre part by two joints, thus leaving a hole in the middle, through which the secretions of the vagina are allowed to escape. Instead of the screw, Dr. Eulenburg perfected the opening and shutting of the wings, by means of an elastic india-rubber ring, which runs in a channel around the body of the hysterophor, immediately below the two joints.

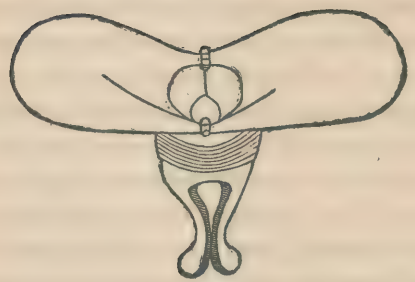

Fig. 4.

By this contrivance, the introduction of the instrument is greatly simplified, and as it shuts on its own account, by the elasticity of the india-rubber ring, its application becomes very easy, thus requiring not the least ingenuity upon the patient's part. (See figs. 4 and 5.) As every

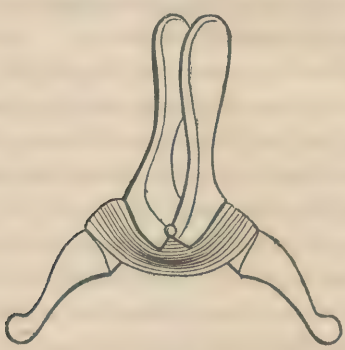

Fig. 5.

particle of metal is avoided (except the small pin, running through the joint), and as the box-wood resists more than any other substance the corrosive influence of the vaginal discharges, it is lighter, will keep longer, and will cause less irritation than the other instruments.

The author found *four* different sizes, fitting to the

greatest number of cases, viz: for the measure from side to side, $2\frac{3}{4}''$, $3''$, $3\frac{1}{4}''$ and $3\frac{1}{2}''$, and correspondingly the largest antero-posterior diameter of every wing, $1''$ $3'''$, for the two largest sizes, and for the following, $1''$ $4'''$ and $1''$ $5'''$.*

The first application of the instrument ought to be performed by the physician himself, who has to choose the size required for every case. His judgment will be conducted by the sensation of the patient, after walking to and fro for awhile, and more so, by the way in which the india-rubber ring contracts. If the extravaginal portion is not shut entirely, the instrument is too large, and has to be removed; if it shuts too quick, a larger one must be chosen. The following duties devolve upon the patient herself, viz: removing and cleaning it at bed-time, and re-adjusting it before getting up in the morning. This is performed by seizing the buttons at the lower end, and while separating them from each other, as much as possible, the other end of the instrument is to be gently introduced into the vagina till it cannot go any farther; and (when left alone) now it shuts on its own account. The same way is followed in its extraction. Before its introduction, it ought to be well oiled. In order to render this pessary even more harmless, it is advisable to cover its branches with a kind of glove, made of soft deer-skin, which coat may be moistened with cod-liver oil before every application.

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* The instrument has been modified in the construction of the joint after my suggestion, so that the pessary can be easily taken in two lateral pieces, thus allowing a more thorough cleansing, while even the small metallic pin of Dr. E.'s pessary is avoided.

Of great importance is the breadth and direction of the pubic arch, because this is the chief guide for the selection of a pessary. This can be ascertained by introducing the 2d and 3d finger behind the arcus and expand both fingers till every one of them touches one side of the arcus. The distance of the fingers thus obtained may guide our judgment in the choice of an instrument. As a general rule it may be stated, that a comparatively small instrument ought to be tried first, because it very often happens, that even the most extensive prolapsus are benefitted by small instruments.

After the instrument has been closed, the patient must be questioned, as to what her sensations are. If the instrument was too large, a singular kind of smarting is perceived and considerable uneasiness expressed. It is a good plan to have the patient walk around, in order to ascertain if the prolapsus will be perfectly retained by the instrument.

Even in cases where the perineum has been ruptured, our instrument has been used with perfect success, the only precaution to be taken is the choice of a broad pessary.

On the second day after the application of the instrument, the patient must be seen again by her attending physician, because at this time generally certain symptoms occur, which originate from the presence of a foreign body in the vagina, and which prove, that the instrument is too large, *if they are very intense.*

The symptoms alluded to, are a chilly sensation, heat, headache, trembling, nausea, want of appetite, obstinate constipations. The instrument must be removed, and the

vagina must be examined with the speculum, to see if a portion of it is inflamed or ulcerated, a condition always met with, if the instrument chosen was too large. After the third day is over, chills and heat are very trifling, and dissappear entirely some time afterwards.

If the instrument is borne after some days with no discomfort at all, the patient must be taught, how to use it, she must repeat the manœuvre of adjusting and removing it several times in the presence of the physician.

At the time of the monthly courses, the patient had better have the instrument removed, provided she can keep quiet. At times it happens, that a portion of the anterior wall of the vagina falls beneath the pessary. In this case a broader instrument must be chosen, or a small piece of plugged linen must be placed in the midst of the instrument, corresponding with the prolapsed portion, which is easily retained by this contrivance.

In recommending these instruments, and especially the latter one, to the consideration of the profession, I am sustained by the experience of our European brethren, who have used them with such general satisfaction, that scarcely any other form is now in use. Lately Dr. A. Mayer, of Berlin, has published a paper on the use of Zwank's pessary, wherein he reports to have successfully applied it in 230 cases. For my own part, I avoid the use of pessaries as much as possible. But I have had under my care a number of cases, in which a pessary was the only means justifiable. I have tried a great variety of them, and have now come to the conclusion that Zwank's (or Eulenburg's) hysterophor answers better the requisites of a good pessary than any other.

I therefore ask practitioners to give it a fair trial. I do not mean to buy a hysterophor, and sell it to the next woman with prolapsus uteri, but after carefully selecting the case, in which nothing but a good pessary will give sufficient satisfaction, let the different sizes be tested, until the proper instrument is found.

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